# DESCRIPTIONS OF NEW GENERA AND SPECIES OF INDIAN ICHNEUMONIDÆ.

BY

# P. CAMERON.

For the opportunity of describing of the new genera and species recorded in this paper I am indebted to Lieut.-Col. C. G. Nurse by whom they were taken.

# PIMPLINÆ.

XORIDINI.

Agenora, gen. nov.

Areolet large, 5 angled. Transverse median nervure interstitial. Transverse median nervure in hind wings broken shortly below the middle. Median segment areolated; there is a triangular basal area; a large areola, clearly longer than wide, rounded at the base, transverse at the apex, 2 large Cateralareæ, a spiracular area and one large one on the apical slope which is surrounded above and on the sides by a stout keel. Parapsidal furrows distinct; there is a distinct furrow on the lower side of the mesopleuræ. Head cubital; temples broad; occiput margined. Abdominal petiole long and slender, cylindrical, not perceptibly thickened towards the middle; the spiracles are placed almost in the middle. Anterior tibial not contracted at the base, not inflated, their tarsi twice their length; fore spurs large, broad, the 4 hinder minute. Occiput not quite transverse.

I only know the 3 of this genus. In the arrangement of Ashmead (Proc. U. S. Nat. Mus. xxiii, 70.) it would come in near cabocephalus, Ratz., which may be known from it by the transverse median nervure not being interstitial and by the less completely areolated metanotum. Characteristic are the densely haired head and thorax.

Agenora hirticeps, sp. nov.

Black, shining, the head and thorax densely covered with long white hair; the 4 front legs pale fulvous, pale yellow at the base; the hind coxæ and femora red, the rest of them black; wings hyaline, the stigma and nervures black; tegulæ yellow.

Length 9 mm.

August.

The oral region has got injured and its precise form cannot be made out. Mandibles and palpi pale yellow; the former are broad at the base, becoming gradually narrowed towards the apex; I am not sure if they have 1 or 2 teeth, from their being bent accidentaly inwardlly. Scutellum large, roundly convex, but not much raised. First abdominal segment about one half longer than the second; it is covered with longish standing out white hair; the other segments with depressed white pubescence, which is thickest on the apical one. Base of hind tibial narrowed and curved. The abdomen is more than twice the length of the thorax.

#### TRYPHONINÆ.

## TRYPHONINI.

Cyphanza, gen. vov.

Transverse median nervure in hind wings straight, unbroken, areolet oblique, irregular, petiolated, receiving the recurrent nervure near the apex. Discocubital nervure rounded, unbroken, not angled. Transverse median nervure in hind wings received shortly, but distinctly beyond the transverse basal Clypens not separated from the face, its sides above with a distinct fovea. Eyes parallel, not incised; there is a distinct malar space, ocelli in a curve. Scutellum prominent, its sides not keeled. Metanotum with an elongated central basal area, about 6 times longer than wide, extending from the base to the apex, where it becomes narrowed to a sharp point; there is a square, deep area on either side of the apex; outerside there is a larger square area, not clearly defined above, the sides outside the spiracles are bounded by a keel, these 2 keels forming the outer boundaries of the outer apical area. Abdominal petiole longish; its base half the width of the apex; the sides at the base, are keeled to the spiracles, which are placed at the apex of the basal third of the segment. Antennæ moderately stout, longer than the body; the 3rd joint is distinctly longer than the 4th calcaria short, as long as the 2nd tarsal joint; the hinder metatarsus is as long as the following 3 united.

The radius is short, reaching half way between the apex of the stigma and of the wing; it issues from shortly behind the middle of stigma. In the hind wings of the longitudinal nervures only the base of the radius is indicated. The temples and malar space are of moderate length. The metapleura separated from the sternum by a distinct keel. Mandibles broad, shortly, bluntly bidentate. There are small round spiracles near the base of the 2nd abdominal segment. Body and legs densely covered with short white pubescence.

In Ashmead's arrangement (Bull U. S. Nat. Mus. xxiii, 70) this genus runs near to Gensia, Foer.

Cyphanza nigra, sp. nov.

Black, densely covered with short, white pubescence, the face yellow, except for a black line on the upper two-thirds, the palpi testaceous; the 4 anterior tibial and tarsi testaceous. Wings clear hyaline, the nervures and stigma testaceous.

Length 7 mm.

August.

Head and thorax closely punctured, the pleuræ more closely and strongly than the mesonotum.

Apex of clypeus broadly rounded, mesonotum and scutellum shining, the latter with a curved furrow at the base, centre of metanotum weakly, the sides more distinctly punctured. Pleuræ weakly punctured. The recurrent nervure is interstitial with the 2nd transverse cubital. The antennæ moderately

stout, longer than the body, the flagellum densely covered with short black pubescence.

Inoresa, gen. nov.

Eyes large, parallel, incised on the innerside above, the malar space small, clypeus not separated from the face, its apex broadly rounded. There is a flattened plate between the antennæ. These have the 3rd joint fully one-fourth longer than the following, and clearly longer than the scape. Scutellum not much raised; keeled at the base only. Sides of metanotum margined by a distinct keel, abdomen flat, broad; the basal 2 segments become gradually widened; the 1st more than twice longer than the 2nd; the spiracles are placed shortly behind the middle. Wings without an arcolet; the recurrent nervure is received shortly beyond the transverse cubital; the transverse median shortly beyond the transverse basal; the transverse median nervure in hind wings broken distinctly below the middle. Legs stout, short; the femora much swollen, the middle tibial with 2 spurs; claws large, simple. Mandibles broad, stoutly bidentate. Metanotal spiracles large, linear.

This genus in Ashmead's arrangements runs into *Ecclinops*, Foer, which may or may not be identical with *Acrogonia*, it agreeing with it in having the eyes emarginate within.

Inoresa pilosa, sp. nov.

Black, the mandibles, antennal scape, the scutellum, the metanotum from shortly behind the middle, apical third of 1st abdominal segments, and the 2nd and 3rd, except for a broad transverse mark on the base, pale luteous, the legs of a paler luteous colour, the apical half of hinder femora broadly on the innerside and the apex of the hind tibiæ, black; wings hyaline, the stigma testaceous, the nervures black.

Length 12 mm.

Simla, August.

Densely covered all over with pale, slightly tinged with fulvous pubescence antennæ longer than the body, the scape yellow, the flagellum brownish rufous. Face and clypeus strongly, closely punctured. Front and vertex not so strongly punctured; there is a smooth bare space, triangular in space, below the ocelli, the hair is longer and denser on the face than it is on the upper parts; on these the hairs issue from a puncture. Mandibular teeth black, the base of mandibles thickly covered with silvery pubescence. Palpi yellow, covered with white pubescence. Thorax smooth; the hairs issue from tubercles. The pubescence on the pleuræ and median segment is longer and whiter than it is on the mesonotum. Abdomen smooth; the pubescence denser on the apical than on the basal segments, legs densely covered with long white pubescence.

#### MESOLEPTINI.

Letosha, gen. nov.

Wings without an arcolet, the recurrent nervure received clearly beyond the transverse basal. Transverse median nervure interstitial. Transverse median nervure in hind wings broken shortly below the middle, but the longitudinal nervure is very faint, almost obsolete. Median segment long; with 2 stout transverse keels, the spiracles about 3 times longer than wide, clypeus roundly convex, clearly separated from the face by a suture, its apex broadly rounded. Eyes large, parallel; the malar space small. Scutellum longish, narrowed towards the apex, which has a long, oblique slope; its sides are margined. Legs long, slender; the hind coxe long, about 4 times longer than wide; claws simple. Occiput margined, almost transverse. First abdominal segment long, slender, cylindrical, slightly dilated at the apex; the spiracles prominent placed shortly before the middle; the segments become slightly gradually widened to the last, which is obliquely narrowed.

The antennæ are longer than the body, filiform. Hinder calcaria short, not half the length of the 2nd tarsal joint, ocelli large, the hinder separated from each other by a slightly less distance than they are from the eyes. Temples wide, obliquely narrowed; the occiput has a sharply oblique slope from the ocelli and are margined. Parapsidal furrows indicated at the base, narrow. Apex of pronotum dilated. Fore tarsi long, slender, clearly longer than the tibiæ. There is a wide depression on the lower apical half of the mesopleuræ and a shorter narrower curved one on the base of the mesosternum. Pterostigma large, longish, the radius issues from shortly beyond its middle, the transverse cubital nervure is short. Mandibles unequally bidentate.

The precise affinities of this genus may be left over until its Q is known. From the position of the abdominal spiracles I refer it, for the present, to the Tryphonide, Tribe Mesoleptini.

Letosha longicoxis, sp. nov.

Black, the face, clypeus, mandibles, palpi, a somewhat triangular mark on the apex of the pronotum, the lower edge of the propleuræ, the lower inner orbits broadly, the mark gradually narrowed above and a narrow line down the base of the metapleuræ, pale yellow, the apex of the scutellum, the apex of the 1st abdominal segment narrowly, the base of the 2nd somewhat more broadly, the base of the 3rd still more broadly, and the whole of the 3rd rufotestaceous. Legs rufo-fulvous, the anterior paler; the hind coxæ, apex of hind tibiæ broadly and the basal half of metatarsus black; the rest of the hinder tarsi white. Wings hyaline, the stigma fusevus, the nervures black.

Length 8 mm.

Simla, August.

Antennæ filiform longer than the body, black, the pediele testaceous, the flagellum densely covered with short, stiff pubescence. Head, prothorax, mesonotum and scutellum smooth and shining, the lower part of the mesopleuræ closely, strongly, longitudinally striated, the upper part and the greater part of the apex smooth and shining; the metapleuræ coarsely rugosely reticulated. Basal part of metanotum smooth, depressed in the middle at the base; its apex irregularly, obscurely striated; the part between the 2 keels is strongly, irregularly striated; the apex is irregularly striated laterally. Metapleuræ coarsely

irregularly, closely, obliquely striated. Hind coxe closely, coarsely, transversely striated.

#### CTENOPELMINI.

Fintona, gen. nov.

Areolet 4-angled, the nervures meeting in front; the transverse median nervure received beyond the transverse basal; the transverse median nervure in hind wings broken below the middle, the median nervure distinct. Metanotum not areolated, longish, the top of apical slope bordered by a stout keel. Abdominal petiole longish longer than the 2nd segment, the base half the width of the apex, not widened behind the spiracles; the 2nd and 3rd segments longer than wide, the 4th square. Clypeus separated from the face by a shallow furrow, roundly convex, its apex rounded. Claws pectinated: the pectinations strong at the base only and few in number. Ocelli wider from each other than to the eye margin. Vertex separated from occiput by a weak indistinct keel. Sheaths of ovipositor shortly projecting, not much longer than the last segment. Clypeal foveæ without a hair tuft. Legs long, slender, as are also the antenne,

If the abdomen is to be called "petiolate," this genus, in Ashmead's tables, would come in near *Eczetesis*, Foerster. It is a slenderly built form with long, slender legs, more like an Ophionid than a Tryphonid.

Fintona nigripalpis, sp. nov.

Black; the abdomen from the 2nd segment red, the apical segment darker coloured; the legs similarly coloured, the hind tibiæ and tarsi black, the other tarsi infuscated; wings hyaline, the stigma and nervures black. Q

Length 11 mm.

Simla, August.

Head, pro-and mesothorax closely, somewhat strongly punctured: the metanotum much more strongly punctured, more or less reticulated in the middle; the apical transverse keel stout, smooth; the part below it closely punctured, more or less striated. Areolet 4-angled, the nervures meeting in front, the recurrent nervure received before the middle; the disco-cubital and the recurrent nervures largely bullated. First abdominal segment closely strongly punctured, more or less striated in the centre, narrowly at the base, more strongly near the apex, the 2nd segment is closely, strongly, the 3rd not so strongly punctured. Antennæ longer than the body, slender; the 3rd joint distinctly longer than the 4th. Tarsi closely pilose. Palpi black, stout, covered with white pubescence.

Pauroctenus, gen. nov.

Wings with an areolet which is small, triangular, oblique, the recurrent nervure interstitial with the 2nd transverse cubital. Transverse median nervure received shortly beyond the transverse basal. Transverse median nervure in hind wing broken distinctly below the middle clypeus separated from the face, but not by a distinct furrow at least in the centre, its apex broadly rounded.

Base of metanotum with 5 large area, including a spiracular; the central is of equal width and is fully twice longer than wide, there are 4 wide areal on the apical slope, the central apical keel is received in the middle of the areola. Spiracles almost circular. Basal segment of abdomen sessile, twice longer than wide; the back on the basal half with 2 keels. Legs normal, longish, the claws with long spines. The nervures in the hind wings are distinct. Clypeal foveæ large, bare, occiput bordered by a distinct keel. Basal joint of flagellum not much longer than the 2nd. Face not much dilated.

The affinities of this genus may be left over until the Q is known. It comes near *Polyblastus* in the tables given by authors.

Pauroctenus pallipes, sp. nov.

Black, shining, the tegulæ, clypeus, mandibles, palpi and legs pale yellowish, tinged slightly with testaceous; the apex of the hinder tibiæ and the hind tarsi except the basal half of the metatarsus blackish; wings hyaline, the stigma testaceous, the nervures darker coloured.

Length 6-7 mm.

Simla, August.

Shining, smooth, except the face, which is distinctly punctured; covered with short pale pubescence, which is longest on the abdomen and on the metapleuræ. The basal segments of the abdomen are shagreened.

Monoblastus orientalis, sp. nov.

Black, the apex of the 2nd, the whole of the other abdominal segments and the sheath of ovipositor bright ferruginous; the anterior tibix and tarsi below dark testaceous; the mandibles dark testaceous before the middle; the body and legs densely covered with short white pubescence, wings hyaline, the nervures and stigma black; the areolet distinctly appendiculated, the pedicle as long as the basal transverse cubital nervure which is straight, oblique, the apical is longer, is roundly curved and largely bullated below; the recurrent nervure is interstitial with it.

Length 6 mm.

Simla, September.

Head and thorax finely, closely punctured, the mesonotum more weakly than the pleuræ. Metanotum with 3 large areal on the basal part, the central being the smaller and having the keels slightly curved, there being also a keel outside the spiracles; there are 4 squarish area on the apical slope, the outer being irregularly longitudinally reticulated: the lower, basal part of the metapleuræ irregularly obliquely striated, the striated part bounded at the apex by a keel. Basal 2 segments of the abdomen closely punctured; the 1st with a longish, deep depression at the base, this being bordered by narrow keels which extended beyond it, the sides below being also keeled.

The transverse median nervure in hind wings is broken below the middle; the longitudinal nervure, as are also the upper ones, being faint; the transverse median nervure is received distinctly beyond the transverse basal.

## BASSINI.

Sussaba, gen. nov.

• Q Antennæ 22-jointed, the last joint twice the length of the preceding, wings without an areloet; transverse median nervure in forewings interstitial; in the hind wings it is broken almost in the middle. Clypeus separated from the face, its apical two-thirds depressed, the apex transverse. Scutellum roundly convex, the sides keeled to the middle. Metanotum with 2 stout curved keels in the centre of the base. Basal segment of abdomen sessile, longer than the 2nd, its spiracles prominent, the 2nd segment with thyridia: ovipositor prominent, broad.

The abdominal spiracles are placed well behind the middle; the sides beyond them are bordered by a keel; the 2nd segment has no keels; the 2nd segment is clearly longer than wide. The mandibles have their teeth below united by a membrane, the projecting apical parts of the teeth thus being short. Face and clypeus almost bare, not curved with silvery pubescence. The malar space is nearly as long as the antennal scape. Occiput and cheeks margined. Middle tibial with 2 spurs; the 3rd joint of the tibial is slightly longer than the last; the long spur of hind tibial one-third of the length of metatarsus.

This genus looks very like a *Bassus*. In the arrangement of Dr. Ashmead it would come in near *Syntactus* and *Calliphrusus*.

Sussaba bicarinata, sp. nov.

Black, the base of mandibles, palpi, tegulæ and a spot on apex of pronotum and a very narrow line on its base, yellow; the gastrocœli, the apex of the 2nd and the base of the 3rd abdominal segments narrowly rufous. Legs black, the fore legs almost entirely, the middle femora above, and the 4 hinder tibial below, testaceous, the calcaria pale testaceous. Wings hyaline, the nervures and stigma black.

Length 5 mm.

September.

Head smooth and shining; the clypeus clearly separated, the lower part depressed, obscurely longitudinally striated. Mesonotum closely, strongly punctured. Scutellum roundly convex, the sides of the base keeled. Metanotum at the base irregularly rugose; its centre with 2 keels which diverge roundly at the apex; the apical slope closely, rugosely transversely striated. Pleuræ smooth, the lower part of the pro-and metapleuræ striated. Median segment thickly covered with white pubescence. First abdominal segment somewhat strongly longitudinally striated, the strial interlacing; the basal half of the 2nd finely, closely regularly striated; the other segments are smooth; the sheath of the ovipositor is longish.

Bassus indicus, sp. nov.

Black, the face, clypeus, a broad line on the lower part of the inner orbits, mandibles except at the apex, palpi, a large mark on the sides of the mesonotum commencing at the tegulæ narrowest at the apex, dilated

inwardly at the base, apical half of the propleure, the mark gradually narrowed below, the greater part of the lower half of the mesopleure, the mark widest at the apex, a line on the base of the metapleure, sentellum, narrow lines on the apices of the abdominal segments, the lines on the apical segments indistinct. Legs fulvous, the 4 anterior paler, more yellowish in tint; the apical third of the hind tibial and the hind tarsi black. Wings hyaline, the nervures and stigma black.

Length 6 mm.

Simla, August.

Antennal scape yellow, the flagellum brown beneath. Head smooth, the centre of the face bordered by a furrow, which is wider and deeper above than below. A distinct furrow on the middle of the front, the part on either side of it closely punctured. Mesonotum closely, distinctly punctured: the scutchlum sparsely punctured in the middle, apical slope of the metanotum with a broad, curved depression above. Basal two segments of abdomen opaque, distinctly aciculated-punctured, the centre of the 1st and the base of the 1st closely finely striated; the 1st is twice longer than it is wide at the apex, the spiracles are prominent. There are no keels on the metanotum, nor transverse furrows on the abdominal segments. The 1st abdominal segment is longer compared with the 2nd than it is in B. lactatorius. The incision in the centre of the clypens is distinct.

The European (now almost cosmopolitan) species Bassus lactatorius, F., is now found in India.

## CRYPTINE.

Distantella pilosella, sp. nov.

Black, the face, clypeus, mandibles except the teeth, palpi, inner orbits narrowly, the outer from shortly above the middle, the line obliquely narrowed above, a narrow line, not extending to the base, on the pronotum, a broader, complete one on the lower edge of the propleura, tubercles, apical half of scutellum and tegulæ pale yellow; the apices of the abdominal segments narrowly testaceous, legs: the 4 anterior yellow, tinged with testaceous, the hind coxæ and trochanters black, the femora dark rufous: the tibial on the basal half testaceous, paler at the base, the rest blackish; the tarsi white, the basal half of the basal joint black. Wings clear hyaline, the nervores and stigma black. Antennæ black, the scape yellow below.

Length 12mm.

Simla, August.

Face and clypeus closely punctured, thickly covered with white pubescence: the front below the ocelli aciculated, finely irregularly reticulated. Pro-and mesothorax strongly punctured, the pleura more or less finely striated. Basal half of scutellum more strongly and sparsely punctured than the mesonotum; its apical slope more strongly and closely punctured. Base of metanotum behind the keel closely, strongly punctured; the space between the keels punctured on the outerside, the middle irregularly striated and with some scattered

# 730 JOURNAL, BOMBAY NATURAL HISTORY SOCIETY, Vol. XIX.

punctures; the apical slope strongly, irregularly, mostly longitudinally reticulated, the basal keel is distinct, roundly curved narrowly backwards in the middle; the apical keel is more irregular and more broadly rounded backwards. Areolet of moderate size, narrowed in front; the recurrent nervure is received shortly behind the middle. The mesopleural furrow is much widened at the base and is crenulated in the middle. Tibiæ and tarsi spinose.